

## WHAT IS CLAIMED IS:

1. An adjustable support foot, comprising:
  - a support post having a base and a screwed axle erected thereon;
  - 5 a plurality of retaining plates each provided with a screw thread on an inner wall thereof, a rim of an upper end of each of said retaining plates being provided with a tapered surface, a rim of a lower end of each of said retaining plates being provided with a transverse flange having a tapered surface;
  - 10 a control device including a retaining cylinder, a control ring, a spring, an axial actuator and a radial actuator, said retaining cylinder being a hollow cylindrical body provided with a lower receptacle hole and an upper axial hole, a top end of said receptacle hole being connected to said axial hole through a tapered section, a wall of said retaining cylinder surrounding
  - 15 said receptacle hole being provided with a plurality of inwardly tapered through holes each for housing a steel ball, said control ring being a ring body enclosing said retaining cylinder, an inner wall having a plurality of slots, said spring coaxially situating in an upper portion of said retaining
  - 20 cylinder and constantly pushing said control ring downward, said axial actuator being connected to said control ring for controlling the elevation of said control ring, said radial actuator being connected to said retaining plates for pulling
  - 25 said retaining plates outward by an elastic means thereof; and an outer shell being a hollow shell body enclosing said control

device, said outer shell having two axial holes each on a top surface and a bottom surface thereof, said bottom axial hole further including an upwardly tapered section;

whereby at least two retaining plates are used to engage said

5 screwed axle of said support post and then housed in said receptacle hole of said retaining cylinder, said retaining plates being secured within said retaining cylinder by engaging said upper tapered surfaces of said retaining plates with said tapered section of said retaining cylinder and said

10 flanges of said retaining plates with said tapered section of said outer shell, said axial actuator and said radial actuator capable of being controlled from outside for quickly adjusting the height of said adjustable support foot.

2. The adjustable support foot of claim 1 wherein the shaft of

15 said base of said support post is selected from the group of a fixed shaft and a swivel shaft.

3. The adjustable support foot of claim 1 wherein said retaining plates are elongated plate having an arced transverse cross-section and each provided with a screw hole for

20 connecting said radial actuator.

4. The adjustable support foot of claim 1 wherein the number of said retaining plates is determined by the diameter of said screwed axle of said support post.

5. The adjustable support foot of claim 1 wherein said retaining

25 cylinder of said control device is of T-shaped lateral cross-section and is provided with a ring flange at an upper end thereof.

6. The adjustable support foot of claim 1 wherein said control ring of said control device is provided with a plurality of elongated slots for situating said axial actuator.
7. The adjustable support foot of claim 1 wherein said axial actuator of said control device is a plurality of screws secured within the lateral wall of said control ring, wherein each of said screws is wound around by a steel sling, and wherein each of said steel slings extends out of said outer shell so that they can be pulled from outside.
8. The adjustable support foot of claim 1 wherein said axial actuator of said control device is a pull rod screw-mounted on the outer lateral wall of said control ring, said pull rod extending out of the outer lateral wall of said outer shell.
9. The adjustable support foot of claim 1 wherein said radial actuator of said control device is a plurality of screws going through said outer shell, said control ring and said retaining cylinder and connected to said retaining plates, each of said screws further including an elastic member and a spacer for urging said retaining plates to move outward.
10. The adjustable support foot of claim 1 wherein said outer shell further comprises a lateral wall, an upper cover and a lower cover, wherein said lateral wall is provided with screw threads each around an upper rim and a lower rim thereof for securing said upper cover and said lower cover, wherein said lateral wall is further provided with a plurality of through holes for passing said radial actuator, wherein said upper cover is of U-shaped lateral cross-section, and is provided with a screw

thread around an inner lateral wall thereof and a plurality of through holes for passing said steel slings and an axial hole on the top surface thereof, and wherein said lower cover is of U-shaped lateral cross-section and is provided with a screw  
5 thread around an inner lateral wall thereof and an axial hole and an upwardly tapered conic hole on a bottom surface thereof.